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| 10/705,554 | 11/10/2003 | Gerhard Mersch | 60,130-1915;02MRA0419 | 5495 |
| 26096 | 7590 | 11/19/2004 | EXAMINER | |
| CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009 | | | SMITH, TYRONE W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2837 | |

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,554

Applicant(s)

MERSCH, GERHARD

Examiner

Tyrone W Smith

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/19/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 11, where the limitation states..." a blocking signal generator that generates a blocking signal when at least one of the first and second sensor indicates that at least one of the first and second window pane is approaching a fully closed position thereof".

Examiner want^s clarification^s to whether the blocking signal detects both an obstruction and indicating window approaching closure. Examiner believes the Applicant meant a fully closed position instead of approaching a fully closed position. Clarification would be appreciated.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 6, 8 and 9 rejected under 35 U.S.C. 102(e) as being anticipated by Cregeur (6541929).

Regarding Claims 1 and 2. Cregeur discloses an apparatus and method for controlling vehicle power windows which includes detecting or checking when the first or second window pane (Figure 1 items 12-18) is approaching a fully closed position (using a position sensor Figure 1 item 62; column 3 lines 10-40) and using the control switches (Figure 1 items 52-58) for moving the first window pane to an approximately closed position if the second window pane is approaching the fully closed position, moving the first window pane to the fully closed position if the second window pane is not approaching the fully closed position where the switches control the power windows (column 2 lines 49-67, column 3 lines 1-10, 62-67 and column 4 lines 1-10).

Regarding Claim 6. Cregeur discloses approximately closed position corresponds to a position where at least one of the first and second windowpane contacts a corresponding seal with low force (using a position sensor Figure 1 item 62; column 3 lines 10-40).

Regarding Claims 8 and 9. Cregeur discloses a step of moving the first window pane to the fully closed position comprises pressing the first window pane against a seal until blocking of the window lifter motor occurs (column 3 lines 10-40).

3. Claims 11-12 and 15-18 rejected under 35 U.S.C. 102(b) as being anticipated by Ikeda (JP10-102905).

Regarding Claim 11 and 12. Ikeda discloses a power window device, which includes a first and a second window lifter motor (Figure 1 item 8); a first and a second controller (Figure 1 item 10) that drive the first and second window lifter motors; a actuation and detection control device or blocking signal generator (Figure 1 item 18) that generates a blocking signal when at

least one of the first and second sensor (Hall or Pulse sensors; Figure 1 item 24) indicates that at least one of the first and second window pane is approaching a fully closed position thereof, and checks whether one of said first and second controllers is transmitting a blocking signal (pages 4-5 section [0025-0033]). Further, the first controller causes the first window lifter motor to move the first window pane to an approximately closed position if the checking circuit detects the blocking signal from the second controller and causes the first window lifter motor to move the first window pane to a fully closed position if the checking circuit does not detect the blocking signal from the second controller. The controllers are separate from each other therefore a first window, controlled by the first controller, can proceed to close whether or not a checking circuit or similar detect a blocking signal from the second controller; this does not impede the progress of the first window. (Figure 1, abstract, pages 4-9).

Regarding Claims 15 and 18. Ikeda discloses a power window device, which includes a first and a second window lifter motor (Figure 1 item 8); a first and a second controller (Figure 1 item 10) that drive the first and second window lifter motors; a actuation and detection control device or blocking signal generator (Figure 1 item 18) that generates a blocking signal when at least one of the first and second sensor (Hall or Pulse sensors; Figure 1 item 24) indicates that at least one of the first and second window pane is approaching a fully closed position thereof, and checks whether one of said first and second controllers is transmitting a blocking signal (pages 4-5 section [0025-0033]). The actuation and detection control device or blocking signal generator (Figure 1 item 18) used by Ikeda performs signal checking and generating.

Regarding Claim 16. Ikeda discloses the first and second controllers control the first and second window lifter motors, respectively, by pulse width modulation (pages 4-5 section [0025-0033]).

Regarding Claim 17. Ikeda show in Figure 1 that the first and second controllers are connected to a bus.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Cregeur (6541929) in view of Ikeda (JP10-102905).

Cregeur discloses an apparatus and method for controlling vehicle power windows which includes detecting or checking when the first or second window pane (Figure 1 items 12-18) is approaching a fully closed position (using a position sensor Figure 1 item 62; column 3 lines 10-40) and using the control switches (Figure 1 items 52-58) for moving the first window pane to an approximately closed position if the second window pane is approaching the fully closed position, moving the first window pane to the fully closed position if the second window pane is not approaching the fully closed position where the switches control the power windows (column 2 lines 49-67, column 3 lines 1-10, 62-67 and column 4 lines 1-10). However, Cregeur does not disclose detecting whether the power window (first or second) has arrived at an end zone (threshold) before the power window is fully closed.

Regarding Claims 3 and 5. Ikeda discloses a power window device, which includes a device for suspending the closing movement of the window when detecting an object caught in the window (end zone before complete closure) and then learning and renewing the data for

detection of an obstruction of the window. The data read in the position in which the area of obstruction occurred (end zone or threshold) (abstract).

It would have been obvious to one of ordinary skill at the time of invention to use Cregeur's apparatus and method for controlling vehicle power windows with Ikeda's a power window device. The advantage of combining the two would provide a system that can detect obstruction and retain data for detection future obstructions.

Regarding Claim 4. Cregeur discloses the claimed invention except showing the end zone covers approximately 4 mm before the fully closed position. It would have been obvious to one having ordinary skill in the art at the time the invention was made to program or adjust the end zone or threshold as related to the closure of the power window. In re Stevens, 212 F.2d 197, 101 USPQ 284 (CCPA 1954) (Claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body portion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance, and because there was an art-recognized need for adjustment in a fishing rod, the substitution of a universal joint for the single pivot of the prior art would have been obvious.).

It would have been obvious to one of ordinary skill at the time of invention to use Cregeur's apparatus and method for controlling vehicle power windows with Ikeda's a power window device. The advantage of combining the two would provide a system that can detect obstruction and retain data for detection future obstructions.

5. Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Cregeur (6541929) in view Ikeda (JP10-102905) and Itoh et al (4870333).

Creguer discloses an apparatus and method for controlling vehicle power windows which includes detecting or checking when the first or second window pane (Figure 1 items 12-18) is approaching a fully closed position (using a position sensor Figure 1 item 62; column 3 lines 10-40) and using the control switches (Figure 1 items 52-58) for moving the first window pane to an approximately closed position if the second window pane is approaching the fully closed position, moving the first window pane to the fully closed position if the second window pane is not approaching the fully closed position where the switches control the power windows (column 2 lines 49-67, column 3 lines 1-10, 62-67 and column 4 lines 1-10). However, Creguer does not disclose checking whether a third window lifter is transmitting a blocking signal when the first windowpane reaches the approximately closed position.

Ikeda discloses a power window device, which includes a first and a second window lifter motor (Figure 1 item 8); a first and a second controller (Figure 1 item 10) that drive the first and second window lifter motors; a actuation and detection control device or blocking signal generator (Figure 1 item 18) that generates a blocking signal when at least one of the first and second sensor (Hall or Pulse sensors; Figure 1 item 24) indicates that at least one of the first and second window pane is approaching a fully closed position thereof, and checks whether one of said first and second controllers is transmitting a blocking signal (pages 4-5 section [0025-0033]. Further, the first controller causes the first window lifter motor to move the first window pane to an approximately closed position if the checking circuit detects the blocking signal from the second controller and causes the first window lifter motor to move the first window pane to a fully closed position if the checking circuit does not detect the blocking signal from the second controller. The controllers are separate from each other therefor a first window, controlled by the first controller, can proceed to close whether or not a checking circuit or similar detect a blocking signal from the second controller; this does not impede the progress of the first

window. (Figure 1, abstract, pages 4-9. However, neither Creguer nor Ikeda discloses starting a counter corresponding to a waiting time if the checking step does not detect a blocking signal and moving the first window pane to the fully closed position and transmitting a blocking signal when the counter has reached a predetermined value corresponding to the waiting time.

Itoh discloses an automatic opening and closing device for a window, which includes starting a counter corresponding to a waiting time if the checking step does not detect a blocking signal (column 14 lines 10-16); moving the first window pane to the fully closed position and transmitting a blocking signal when the counter has reached a predetermined value corresponding to the waiting time (column 14 lines 17-26). Also refer to the abstract.

It would have been obvious to one of ordinary skill in the art at the time of invention to use Cregeur's apparatus and method for controlling vehicle power windows, Ikeda's a power window device and Itoh's an automatic opening and closing device for a window. The advantage of combining the invention would provide a system, which can have fast response, possible to exhibit a desirable ventilative ability, and can prevent the accident of squeezing an object in the opening/closing device.

6. Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Cregeur (6541929) in view of Kurihara et al (4536687).

Cregeur discloses an apparatus and method for controlling vehicle power windows which includes detecting or checking when the first or second window pane (Figure 1 items 12-18) is approaching a fully closed position (using a position sensor Figure 1 item 62; column 3 lines 10-40) and using the control switches (Figure 1 items 52-58) for moving the first window pane to an approximately closed position if the second window pane is approaching the fully closed position, moving the first window pane to the fully closed position if the second window

pane is not approaching the fully closed position where the switches control the power windows (column 2 lines 49-67, column 3 lines 1-10, 62-67 and column 4 lines 1-10). However, Creguer does not disclose checking whether a third window lifter is transmitting a blocking signal when the first windowpane reaches the approximately closed position. However, Creguer does not disclose checking whether the vehicle engine is running, wherein the steps of moving the first (or second) windowpane to an approximately closed position are executed only when the vehicle engine is running.

Kurihara discloses an apparatus for controlling power windows of a vehicle, which includes checking whether the vehicle engine is running (column 2 lines 16-38); moving the first (or second) windowpane to an approximately closed position are executed only when the vehicle engine is running (column 2 lines 16-38) Note that in Kurihara if the automatic closure unit is off, then the engine have to be turned on in order to close the power windows (column 4 lines 34-46).

It would have been obvious to one of ordinary skill in the art at the time of invention to use Creguer's an apparatus and method for controlling vehicle power windows with Kurihara's an apparatus for controlling power windows of a vehicle. The combination of the two would provide a system that can detect the window open or closed when the ignition switch is open with the option of automatically closing the window of the it is open if the engine is off.

7. Claims 13 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda (JP10-102905) in view of Itoh et al (4870333).

Regarding Claims 13 and 14. Ikeda discloses a power window device, which includes a first and a second window lifter motor (Figure 1 item 8); a first and a second controller (Figure 1 item 10) that drive the first and second window lifter motors; a actuation and detection control

device or blocking signal generator (Figure 1 item 18) that generates a blocking signal when at least one of the first and second sensor (Hall or Pulse sensors; Figure 1 item 24) indicates that at least one of the first and second window pane is approaching a fully closed position thereof, and checks whether one of said first and second controllers is transmitting a blocking signal (pages 4-5 section [0025-0033]. Further, the first controller causes the first window lifter motor to move the first window pane to an approximately closed position if the checking circuit detects the blocking signal from the second controller and causes the first window lifter motor to move the first window pane to a fully closed position if the checking circuit does not detect the blocking signal from the second controller. The controllers are separate from each other therefore a first window, controlled by the first controller, can proceed to close whether or not a checking circuit or similar detect a blocking signal from the second controller; this does not impede the progress of the first window. (Figure 1, abstract, pages 4-9. However, Ikeda does not disclose a first and second controllers each further comprise a counter, wherein the counter in the first controller delays movement of the first window pane to the fully closed position by the first window lifter motor until the counter has reached a predetermined value corresponding to a waiting time.

Itoh discloses an automatic opening and closing device for a window, which includes a counter (Figure 1 item 7) in the control system where the first controller delays movement of the first window pane to the fully closed position by the first window lifter motor until the counter has reached a predetermined value corresponding to a waiting time (column 14 lines 10-16 and column 14 lines 17-26). For each window there is a separate waiting time. Also refer to the abstract. Applicant is reminded the duplication of parts, in this case first and second controllers with counters, is common in an art where multiple open/closure systems are used in vehicles. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-

Art Unit: 2837

tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed water seal has a "web" which lies ** in the joint, and a plurality of "ribs" ** >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.).

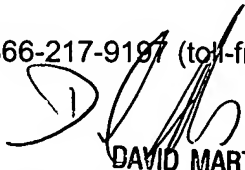
Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent prior art related to power windows or similar is disclosed in the PTO-892.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W Smith whose telephone number is 571-272-2075. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on 571-272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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